

WHAT IS CLAIMED IS:

1. A system for processing special characters used in a dynamic document intended for exchange over a network, comprising:

(a) a special character image management unit comprising:

special character definition means for creating a special character database file that defines which characters to convert into graphic images,

special character image generation means for producing graphical images of the special characters that said definition means has determined as being relevant to the conversion, with reference to a given character pattern dictionary containing character pattern data,

first image data storage means for storing the special character database file produced by said special character definition means and the special character images produced by said special character image generating means, and

uploading means for transmitting the special character database file and the special character image files; and

(b) a document conversion unit comprising:

second image data storage means for storing the special character database file and special character images received from said uploading means,

special character identification means for identifying a special character used in a given source document by consulting the special character database file stored in said second image data storage means,

5 link generation means for producing a link to one of the special character image files that is relevant to the identified special character, and

10 compilation means for compiling an output document by replacing the special character identified in the source document with the link to the corresponding special character image file.

2. The system according to claim 1, wherein said special character definition means defines character codes and character sizes of the special characters to be  
15 converted.

3. The system according to claim 2, wherein said special character image generation means produces one  
20 special character image file for each identified special character, based on the character pattern data read out of the given character pattern dictionary.

4. The system according to claim 2, wherein  
25 said special character image generation means produces as many special character image files as the number of different character sizes for each identified special

character, based on the character pattern data read out of the given character pattern dictionary.

5. The system according to claim 4, wherein  
5 said special character image generation means assigns a file name to each produced special character image file, the file name comprising text fields that indicate the character code and the character size, whereby an appropriate special character image file can be uniquely  
10 and immediately identified by a given character code and character size.

6. The system according to claim 1, wherein  
15 said document conversion unit further comprises font size tracking means for finding character size attribute information in the given source document and maintains the extracted information locally.

7. The system according to claim 6, wherein  
20 said link generation means produces a link to one of the special character image files that meets the special character code identified by said special character identification means and the character size attribute information maintained in said font size tracking means.

25

8. The system according to claim 1, wherein  
said document conversion unit further comprises code

conversion means for converting a character code used in the given source document into another character code belonging to a required coding system, when the character code is identified as a non-special character by said  
5 special character identification means.

9. A document conversion unit which dynamically creates a document from data retrieved from a processing system that uses special characters and reforms  
10 the created document for exchange over a network, comprising:

a special character image dictionary which is a collection of special character image files each containing a graphic image of a special character;

15 a special character database file which contains data to manage the special character image files in said special character image dictionary;

special character identification means for identifying a special character used in the created  
20 document, by consulting the special character database file;

link generation means for producing a link to one of the special character image files that is relevant to the identified special character; and

25 compilation means for compiling an output document by replacing the special characters identified in the source document with the links to the special character

images.

10. The apparatus according to claim 9,  
further comprising font size tracking means for extracting  
5 character size attribute information from the created  
document and keeps the extracted information locally.

11. The apparatus according to claim 10,  
wherein said link generation means produces a link to one  
10 of the special character image files that meets the  
special character code identified by said special  
character identification means and the character size  
attribute information maintained in said font size  
tracking means.

12. The apparatus according to claim 9,  
further comprising code conversion means for converting a  
character code used in the created document into another  
character code belonging to a required coding system, when  
20 the character code is identified as a non-special  
character by said special character identification means.

13. A computer-readable medium storing a  
program which processes special characters contained in a  
25 dynamic document created for exchange over a network, the  
program causing a computer system to function as:

special character definition means for determining

which characters to convert into graphic images, thereby producing a special character database file;

special character image generation means for producing graphical images of the special characters that  
5 said definition means has determined as being relevant to the conversion, with reference to a given character pattern dictionary containing character pattern data;

uploading means for transmitting the special character database file and the special character image  
10 files;

font size tracking means for extracting character size attribute information from a given source document and keeps the extracted information locally;

special character identification means for  
15 identifying a special character used in the given source document by consulting the special character database file stored in said second image data storage means,

link generation means for producing a link to one of the special character image files that is relevant to  
20 the identified special character;

code conversion means for converting a character code used in the created document into another character code belonging to a required coding system, when the character code is identified as a non-special character by  
25 said special character identification means; and

compilation means for compiling an output document by replacing the special character identified in the

source document with the link to the corresponding special character image file.